

# Notes on Indian Birds 5— The races of *Apus affinis* (J. E. Gray) in the Indian Region

BY

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(With one plate)

Stuart Baker (1927, FAUNA 4 : 332) accepted four races of the Common House Swift [*Apus affinis* (J. E. Gray)] from the Indian Region and drew attention to the Ceylon birds being very dark. The distribution of the races was however very unsatisfactorily indicated and led to much confusion among subsequent workers. Ripley (1961, SYNOPSIS : 210-211) accepted an additional form 'from Ceylon and possibly Kerala', and remedied to a great extent the distributional limits of the other races.

Recently (1964, *J. Bombay nat. Hist. Soc.* 60 : 731) I referred to a swift (*A. affinis*) blown into Bombay on 11 November 1957, which I had been unable to name trinomially in Bombay. It was sent to the British Museum (Nat. Hist.) whence Mr. J. D. Macdonald wrote :

'*Sp. No.* 20056 *Apus affinis* : We are unable to determine with certainty the race to which this specimen belongs. In size it agrees most nearly with *subfurcatus* of which we have specimen wings 140 and 141 mm. But it is paler than our specimens of this race and agrees best in tone of colour with specimens of *nipalensis*. It very nearly matches typical *affinis* except for slightly darker wings and larger size.'

I have subsequently been able to get together and/or examine some 120 specimens and, though the straggler into Bombay does not fit clearly into any named group, the general results of the inquiry appear to be worth recording.

The measurements of the different subspecies or groups referred to are incorporated in the table below and the accompanying sketch illustrates the differences in markings between the races referred to in this note. Supplementary remarks are included under each subspecies.

**affinis** (J. E. Gray, 1832) (Ganges, restricted to Cawnpore by Stuart Baker)

Races *affinis* and *galilejensis* are separable from the other races by the upper surface of the tail being appreciably paler than the back. They have also no fork in the tail.

The picture of *affinis* in ILLUSTRATIONS OF INDIAN ZOOLOGY, which forms the original description, shows a distinctly pale head and forehead and no intense black on the back, but the drawing does not appear accurate enough to warrant a subspecific identification thereon. The type locality was restricted to Cawnpore by Stuart Baker (loc. cit.), a fact that is overlooked in the SYNOPSIS. In the Indian specimens available, there is some variation in the intensity of body colour and the amount of grey on the forehead. In most, there is a thin whitish eyebrow but it is often necessary to ruffle the feathers to make it visible. There is a slight decline in size from the Punjab in the north to Cuddapah in the south whence the southernmost specimens are available.

A series of 9 from Mitauri and Hyderabad (Sind), about 80 miles east of Karachi, agrees with these birds and in size forms a part of the cline referred to. The white of the rump is wider<sup>1</sup> (av. 14 mm.) than in the Punjab birds (av. 11.6 mm.) which though slightly larger than those from the south do not appear to show any difference from them in this character. Birds from Calcutta appear to be nearer in this respect to those from Hyderabad (Sind) than to those from the Punjab.

Race *abessynicus* (Streubel) (Massawa) is said to be identical with *affinis* and the one specimen which I have seen from Yemen (Arabia) shows no character which would separate it from Indian birds.

The form occurring in south-west India has still to be determined, though it is believed to be *singalensis*.

#### **galilejensis** (Antinori, 1855) (Sea of Galilee)

Ticehurst in 'Birds of Sind' (*Ibis* 1923, p. 36) identified the birds from Karachi as *galilejensis*, though he said they were a little smaller (wings 131-134 against 132-137); but Whistler & Kinnear (1935, *J. Bombay nat. Hist. Soc.* 38 : 31), comparing the Punjab birds with those from south India, said that there was no point in recognising them as separate and recommended the removal of *galilejensis* from the Indian list. This was probably due to their assuming that the Karachi birds would be the same as those from further north and eastwards in peninsular India.

Fifteen specimens from Karachi and one from the Mekran Coast can be distinguished from *affinis* by the much more prominent ashy white on the forehead and the wider patch of white (av. 14.4 mm.) on the rump. This last character is retained in the series of 9 birds from Hyderabad (Sind) (*supra*) and reappears in 11 adults taken at Calcutta. It is curious that it should not be apparent in a north-south cline.

The Karachi birds have been accepted as *galilejensis*, but they differ from the few topo-typical and other non-Indian Middle East specimens

<sup>1</sup> Throughout this paper the 'width' of the white patch is measured from front to rear along the middle of the body.

of *galilejensis* available for examination in that the white on the forehead, which varies in extent but is distinctive in most, is formed by white-tipped feathers creating a very distinct scaly appearance that does not show in the others—some indeed are almost indistinguishable from *affinis*. This character appears in a single specimen from Mt. Abu (Rajasthan), but a nestling obtained at the same time and place does not differ from another of the same age from Bombay.

In *affinis* the black central feathers of the back are longer and mask the white of the rump in the centre leaving it on an average about 11 to 12 mm. wide against 14 to 15 mm. in *galilejensis*.

The white eyebrow is more pronounced than in *affinis*.

#### **singalensis** Madarász, 1911 (Ceylon)

The head and tail are darker than in *affinis*, the tail being only slightly paler than the back. In *nipalensis* and *subfurcatus* the tail is as dark as the back. The Ceylon birds differ from *nipalensis* in having more gloss on the head and are very similar to *subfurcatus* except for the shorter tail (44.6 mm.), more white on the rump (12 mm.), and the less distinctly forked tail. The white feathers of the chin and rump have dark shafts more often than in Indian birds, another character shared with *subfurcatus*.

Whistler & Kinnear (1935, loc. cit.) said that two specimens from Travancore agreed with the Ceylon birds rather than with *affinis* and this is possibly the basis of Ripley's statement quoted earlier.

#### **nipalensis** (Hodgson, 1836) (Central region of Nepal, restricted to Khatmandu by Biswas)

It was described as 'sooty black glossed with green' with no other characters mentioned to distinguish it from *affinis*. Stuart Baker (loc. cit. : 332) said that it differed from *affinis* in having the crown and forehead all brown against grey, not white, in *affinis*. He added that it was a much darker bird than *affinis* and *galilejensis* and he extended its range southwards to Mysore, Travancore, and Cochin. The form in the south-west has yet to be identified but, even if it is found to be similar to *nipalensis*, the distribution is certainly broken in peninsular India, which is occupied by *affinis*. The description is generally correct, but in some of the specimens from Nepal (which include old specimens labelled *subfurcatus*) the back is dark brownish and does not show the green gloss mentioned in the original description. Three specimens from the British Museum (Nat. Hist.) have dark glossy backs and brown heads, indicating that the specimens retained in India have either faded and lost this colour or they represent a juvenile plumage of a nature which does not show itself in *galilejensis* or *affinis*.

TABLE OF MEASUREMENTS (in mm.) OF RACES OF *Apus affinis*

No. of specimens	Particulars of specimens	Wing	Tail	White on rump (measured along middle of body)
<b>affinis</b>				
6	Punjab, Delhi (1)	130-135 av. 132.5	40-43 av. 41.6	11-13 av. 11.6
18	Rajasthan, Gujarat, Kutch, Bombay, Indore, Cuddapah, Darbhanga	123-132 av. 127.5	37-43 av. 40.2	8-15 av. 11.3
6	Juveniles (only two measured)	85, 63	39, 38	—
17	Calcutta	124-132 av. 129 (7 measured)	38-44 av. 41 (15 measured)	12-17 av. 14.5 (11 measured)
9	Mitauri and Hyderabad (Sind)	123-132 av. 129.8	39-44 av. 41.5	13-16 av. 14
<b>galilejensis</b>				
10	Palestine, Middle East, Shiraz (1)	130-135 av. 132.5	40.5-45 av. 42.4	12-17 av. 14.7
16	Karachi (several in moult) and Mekran (1)	123-132 av. 127	39-42 av. 40.6	12-17 av. 14.4
<b>singalensis</b>				
6	Ceylon	127-130 av. 129.3	43-45 av. 44.6	10-13 av. 12

# subfurcatus

3	Pahang (2), Malacca	..	135 ♀ - 140 ♂ av. 137.5	49-54 av. 51.3	6 (Pahang)-12 (Malacca) av. 8
4	Inner Gulf of Siam	..	125 ♀ - 130 ♂ av. 127	48-53 av. 50.5	8-13 av. 11.4

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6	Khatmandu, Nepal	..	128-137 av. 132.3	42-46 av. 44	10-13 av. 12.4
16	Nepal (see Biswas, 1961, <i>J. Bombay nat. Hist. Soc.</i> 58 : 119)	..	132-138 av. 133 (one with 118 mm. wing is excluded)	42-49 av. 45	?

# Race/Races uncertain

3	Kurseong (2), Terai (possibly <i>nipalensis</i> )	..	128-135 av. 131	41-43 av. 42	8-10 (tails appear tucked in)
1	Darjeeling, ♂ with gloss on head	..	133	44	15
4	Migrants (?) to Samastipur (Darbhanga), Chanda (Maharashtra), and Kendrapara (Orissa) (2)	..	132-139 av. 135	46-49 av. 47.7	11-13 av. 12
1	Haflong, North Cachar	..	135	48	12
1	Bombay (straggler)	..	143	48	9

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Hodgson, with the original description, said that it remained in Nepal the whole year. The distribution of this race outside Nepal is uncertain and most records from outside Nepal are very confused. It was listed in the synonymy of *affinis* both by Jerdon (1870, BIRDS OF INDIA) and Blanford (1895, FAUNA), which resulted in everything that did not agree with *affinis* being labelled '*subfurcatus*' including specimens from Nepal, Chanda (C.P., now Maharashtra), Kendrapara (Orissa), Samastipur (Darbhanga, Bihar), and Haflong in Assam.

While the birds from Nepal can be accepted as *nipalensis*, the others are dealt with as a separate group in the table of measurements.

#### **subfurcatus** (Blyth, 1849) (Penang)

This was separated from *affinis* as 'larger, deeper coloured, with tail feathers conspicuously more pointed and the outermost measuring  $\frac{1}{4}$ " longer than the middle, wing  $5\frac{1}{4}$ " [133 mm.], tail  $2\frac{1}{8}$ " [54 mm.]. General colour [including head—H.A.] much blacker than in *affinis*, the upper and lower tail coverts being quite black; the white band on the tail is narrower and less purely white, and the white of the throat is also less pure'. It is also specifically said to be non-migratory. Two fresh specimens from Pahang (Malaya), which is not very far from the type locality, tally entirely with this description. The colour plate in Robinson's BIRDS OF MALAY PENINSULA (1927, 1 : 126) shows a brown head and is probably based on a foxed specimen.

#### **Race/Races uncertain**

The birds from north-eastern India have either shorter tails or non-glossy heads, and do not agree with *subfurcatus*. They fall into the following groups :

(a) A single specimen recently (1959) collected at Darjeeling differs from *nipalensis* in having a dark glossed head, but its broad white rump (15 mm.) and shorter tail (44 mm.) separate it from *subfurcatus*.

(b) Three others from the neighbourhood [Kurseong (2) and Terai (1)] are similar to *nipalensis* in size and colour, but lack the gloss on the back. All are more than 50 years old and may have faded.

(c) Four birds with dark tails from non-Himalayan areas [Samastipur (Darbhanga), Kendrapara (Orissa), and Chanda (Maharashtra)] average slightly larger than *nipalensis* and have distinctly longer (46-49 mm.) tails. The one from Chanda is noted in Blanford's FAUNA as *subfurcatus*. These are believed to be migrants to the area—another specimen, which I collected from a nesting colony in Chanda District, is certainly *affinis*.

(d) One bird, 17 May 1904, from Haflong (North Cachar) agrees with those in (c). Earlier, Stuart Baker (1897, *J. Bombay nat. Hist. Soc.* 10 : 544) referred to the resident birds of North Cachar as *subfurcatus*.